IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Appln. of: Robert Filepp et al. Group Art Unit 2312

Serial No.: 08/158,033 Examiner: D. L. Robertson

Filed: November 26, 1993

Title: METHOD FOR STORING DATA
AN INTERACTIVE NETWORK

AMENDMENT

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

In response to the Official Action dated April 5, 1994, Applicants request the following amendment be entered in their application, and that their application be reconsidered in light of those amendment and the related remarks presented below.

In the Drawings:

Applicants request that the Examiner approve the following changes to the drawings:

Delete Figs. 4d, 5a, 5b, 6, 9 10, and 11; and

Amend Figs. 7 and 8 as shown in red ink on the accompanying sheets.

In the Specification:

At page 2, line 5, after "issued", delete "January" and insert --September 13--;

At page 2, line 6, beginning, insert --5,347,632--;

At page 7, line 24, after "4b", delete "," and insert --and--;

At page 7, line 24 after "4c", delete "and 4d";

At page 7, line 28, beginning, starting with "Fig. 5a", delete through page 8, line 4 ending with "be practiced;";

At page 8, line 5, after "Fig." change "7" to --5--;

At page 8, line 9, after "Fig." change "8" to --6--;

At page 8, line 13, beginning, starting with "Fig. 9", delete through page 8, line 24 ending with "be practiced.";

At page 8, line 29, after "10," insert --and described more fully in U.S. patent 5,347,632, the contents of which are incorporated herein by reference,--;

At page 9, line 21, beginning, starting with "Continuing", delete through page 10, line 7 ending with "personal computers.";

At page 10, line 8, after "400", delete "formulated in this fashion";

At page 10, line 32, after "locale.", starting with "Partitions may", delete through page 10, line 36, ending with "key words.";

At page 11, line 16, beginning, starting with "Objects carry", delete through page 11, line 32 ending with "partitioned applications.";

At page 12, line 21, beginning, starting with "Network 10", delete through page 13, line 8 ending with "RS 400 unit."

At page 13, line 13, beginning, starting with "Information layer", delete through page 13, line 26 ending with "layer 100.";

At page 15, line 25, beginning, starting with "Reception system", delete through page 16, line 5 ending with "transaction operations.";

At page 16, line 19, beginning, starting with "Each page", delete through page 17, line 31, ending with "detail below.";

At page 18, line 26, after "be", insert --stored and--;

At page 18, line 28, beginning, starting with "In accordance", delete through page 19, line 2 ending with "user's requests.";

At page 19, line 5, after "particularly", delete "in accordance with the preferred form of the invention,";

At page 19, line 10, beginning, starting with "Within this", delete through page 21, line 19 ending with "the user.";

At 23, line 31, beginning, stating with "The specific" delete through page 25, line 16 ending with "by reference.";

At page 26, line 15, after "388,156", delete "now";

At page 26, line 15, after "issued", insert --September 13, 1994--;

At page 26 line 15 after "patent", insert --5,347,632--;

At page 28, line 12, after "388,156", delete "now";

At page 28, line 12, after "issued", insert --September 13, 1994--;

At page 28, line 13, after "patent", insert --5,347,632--;

At page 28, line 15, beginning, starting with "RECEPTION SYSTEM" delete through page 40, line 24, ending with "Event (E).";

At page 60, line 17, after "1989", delete "now";

At page 60, line 17, after "issued", insert --September 13, 1994--;

At page 60, line 17, after "patent", insert --5,347,632--;

At page 60, line 19, beginning, starting with "SAMPLE APPLICATION" delete through page 65, line 4 ending with "apples application.".

In the Claims:

1. (Once Amended) Method for storing data in a computer network, the network including a multiplicity of user reception systems at which respective users can request applications during user sessions, the application being generated from the data, the method comprising the steps of:

a. establishing data stores within the network from which data may be obtained for generating the applications during data usage sessions;

b. associating storage control parameters with the data to be stored, the control parameters dictating predetermined eligibility of the data for storage at the data stores;

c. supplying data to the respective stores for use in generating applications; and

d. retaining data at the stores based on at least the eligibility for storage dictated by the respective storage control parameters.

REMARKS

In the Official Action dated April 5, 1994, the Examiner objected to Applicants' disclosure because of asserted undue length, and rejected Applicants' claims 1-20 contending indefiniteness resulting from the disclosure length. Still further, the Examiner also rejected Applicants' claims 1-20 on stated grounds of anticipation and obviousness in view of known computer procedures and cited art.

More specifically, the Examiner objected to Applicants' disclosure under 37 C.F.R. §1.117 as being unnecessarily prolix. The Examiner maintained Applicants' specification included excessive discussion of the environment used to illustrate the invention and recommended that a significant portion of the specification be eliminated. Further, the Examiner objected to Applicants' drawings contending that a number of figures were unnecessary for an understanding of the invention and suggested that such matter be removed.

With respect to the rejection of Applicants' claims as indefinite, Examiner asserted that because of the undue length of Applicants' specification, ambiguity existed as to what portion of the specification supported the claims and where antecedent basis for claimed matter existed. Because of this,

the Examiner maintained Applicants' claims violated 35 U.S.C. §112, second paragraph.

Finally, with respect to the art, the Examiner contended that Applicant's claims 1 and 2 constituted nothing more than "standard downloading practices" as combined with typical data identification parameters such as file name, date, time and version and accordingly were anticipated under 35 U.S.C. §102(a) and §102(e) by known procedures and U.S. patent 4,751,635 issued to Kret. Yet additionally, the Examiner maintained that Applicants' claims 3 to 20 were directed to conventional usage of personal computer RAM and disk resources, and, accordingly, inherently disclosed and rendered obvious under 35 U.S.C. §103 by the Kret teaching; the Examiner further contended that features such as data caching and data storage management with a most-recently-used algorithm, nowhere disclosed in the cited reference, but, included in Applicants' claims, were, nonetheless, well known and not of patentable significance.

Regarding the Examiner's objection to the scope of Applicant's specification and drawings, Applicants would respectfully point out that the nature of their inventive method and the requirement of the patent laws for both an enabling and, best-mode teaching compel a comprehensive disclosure. Such a disclosure not only benefits Applicants by assuring a fuller appreciation of their invention, but also, serves the public interest by providing a more complete description of Applicants' teaching and a thorough documentation of the art to aid issuance of valid patents in the future.

The Examiner, on the other hand, has taken the view that a comprehensive disclosure burdens prosecution and diminishes clarity. While, because of the complexity of the subject matter here evolved, Applicants do not share the Examiner's view, in the interest of advancing prosecution, the specification has been amended to substantially reduce its size. However, rather that simply deleting subject matter, Applicants have instead elected to replace matter expressly disclosed with matter incorporation by reference to Applicants' parent patent 5,347,632, Accordingly, while the physical extent of the disclosure has been substantially reduced for ease of review, the content has been maintained in the interest of understanding.

Continuing, with regard to the Examiner's rejection of claims 1 to 20 under 35 U.S.C. §112, second paragraph, Applicants must respectfully point out that the Examiner's contentions are wrong and without foundation both as a matter of fact and as a matter of law. Accordingly, the rejection is improper and must be withdrawn.

As a matter of fact, Applicants' specification fully supports the wording used in claims 1 - 20. And, a fair reading of the specification amply demonstrates this. By way of illustration only, regarding claim 1, support for recital of "data stores" can be at least found in the specification at: pg. 2, ln. 19; pg. 5, ln. 15; pg. 11. ln. 36 - pg. 12, ln. 12; pg. 45, ln. 22 - 29. Further, support for the recital or "control parameters" at least can be found at pg. 2, ln. 22; pg. 5, ln.

18; pg. 22, ln 29 - pg. 23, ln. 2; pg. 45, ln. 13 - 22. Continuing, support for "a data identification parameter" recited in claim 2 can be at least found at pg. 6, ln. 28 - pg. 7, ln. 10; and pg. 47, ln. 13 - 32. Regarding claim 3, support for the recital of a least-recently-used algorithm can be found at least at pg. 2, ln. 24 - 25; pg. 6, ln. 1 - 36; pg. 45, ln. 30 - pg. 46, ln. 8; pg. 47, ln. 33 - pg. 48, ln. 12; ln. 48, and ln. 21 - 23. Support for "data storage candidacy" recited in claim 4 at least can be found at pg. 6, ln. 28 - pg. 7, ln. 10; and pg. 47, ln. 2 - 26; pg. 48, ln. 24 - pg. 51, ln. 13. And, support for storage at a "first store portion" "during" a "usage session" and storage at a "second store portion" "between" a "usage session" can be found at pg. 2, ln. 19 - 21; pg. 5, ln. 28 - 36; pg. 6, ln. 1 - 26; and pg. 45, ln. 22 - 29; pg. 48, ln. 13 - 23. As noted, the referenced claim matter and respective support is but illustrative. The elements of Applicants' claims are both supported and have ample antecedent basis in the specification. The Examiner's contentions to the contrary are without foundation and, indeed the Examiner has offered no support for them.

Still further, Applicants are unaware of any statutory of case law authority that would support the Examiner's contention that the length of the specification alone can render claims indefinite under 35 U.S.C. §112, second paragraph. And, again, the Examiner has not undertaken to cite any such support for his position.

Moreover, as a matter of law, the Examiner has misstated the basis for finding claims in violation of 35 U.S.C. ¶112, second paragraph. As repeatedly held by the Court of Appeals for the Federal Circuit and its predecessor the Court of Customs and Patent Appeals, the sole test for determining indefiniteness under the second paragraph of Rule 112 is whether:

> ... one skilled in the art would understand the bounds of the claim when read in light of the specification. If the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, §112 demands no more.

Miles Laboratories Inc. v. Shandon Inc., 27 U.S.P.Q.2d 1123, 1126 (Fed. Cir. 1993), citing *Orthokinetics Inc. v. Safety Travel Chairs Inc.*, 1 U.S.P.Q. 1081, 1088 (Fed. Cir. 1986) and *Hybritech Inc. v. Monoclonal Antibodies, Inc.* 231 U.S.P.Q. 81, 94 (Fed. Cir. 1986).

Applicants would respectfully maintain that once their specification is read, their claims would be readily understood by anyone skilled in the art. Accordingly, the Examiner's rejection of Applicants claims 1 - 20 under 35 U.S.C. §112, second paragraph is wholly with out merit and must be withdrawn.

Continuing, in connection with the objection to the specification, the Examiner requested the Applicants identify the pages of the parent application at which support for the current invention exists. Additionally, the Examiner asked Applicants to indicate when the subject matter of the present invention was first introduced.

With regard to the parent application; i.e., serial number 388,156, filed July 28, 1989, now issued as U.S. patent 5,347,632, description of the current invention can be found in the patent at: col. 2, ln. 60 - col.3, ln. 3; col. 6, lns. 14 - 27; col. 6, lns. 64 - 68; col. 7, lns. 18 - 23; col 7, ln. 64 - col. 8, ln. 8; col.8 lns. 28 - 39; col. 10, lns. 16 - 29; col. 13, lns. 4 - 23; and col. 84, ln. 45 - col. 89, ln. 28.

Concerning the date of introduction of the date storage procedures, Applicants would note that the concept of local storage and its various features have been included in Applicants' disclosures from the date of the first filed application in July of 1988. More specifically, reference to the data storage method can be found in the great-grandparent application, S.N. 219,931, filed July 15, 1988, at: pg. 5, lns. 24 - 26; pg. 9, lns. 17 - 23; pg. 11, lns 4 - 15; pg. 16, lns. 1 - 10; and pg. 41, ln. 6 - pg. 43, ln. 24. Additionally, reference to the data storage method of the current application was also included in grandparent application S.N. 328,790, filed March 23, 1989. Specifically, support for the storage method can be found in the preliminary amendment of the grandparent application at: pg. 6, lns. 5 - 9; pg. 14, lns 6 - 17; pg. 19, lns. 16 -22; pg. 31, lns. 7 - 22; pg. 204, ln. 9 - pg. 207 ln. 7; and the source code filed with the preliminary amendment.

As noted above, the Examiner also rejected various claims of the Applicants' under 35 U.S.C. §102(a), §102(e), and §103. More specifically the Examiner contended that Applicants' claims 1 and 2 amount to nothing more that standard downloading

practices and use of conventional file storage control procedures, and, as a result, are anticipated under §102(a) by these well-known techniques. Additionally, the Examiner maintained that U.S. patent 4,751,635 teaches use of data stores and data transfer at and between the host and workstations of a distributed processing system and, accordingly, anticipate Applicants' claims 1 and 2 under §102(e). Finally, the Examiner asserts that inclusion of caching and staging procedures along with least-recently-used storage management procedures in various of Applicants' claims 3 to 20, does not patentably distinguish those claims over the Kret teaching under §103.

The Examiner's characterization of Applicants' invention and his application of conventional techniques and those taught by Kret to it is, however, flawed and without technical or legal merit. Accordingly, the rejection of Applicants' claims based on the art asserted by the Examiner can not be sustained and must be withdrawn.

First, Applicants' method is not simply the use of conventional downloading procedures and date storage controls such as file name, version or time stamp. Rather, as pointed out in Applicants' disclosure, the association of storage control parameters with the data dictates the eligibility of the data for storage and utilization during a user session. That is, the control parameters establish a predetermined hierarchy and strategy for permitting data to be held and used at the established data store. This goes far beyond simply data

downloading to, for example, RAM or a disk where arbitrary and/or unplanned presence of data at the store dictates whether the incoming data will be allowed admittance or not. As is well known in the art, convention downloading loading techniques have no regard for storage strategy of data usage. Rather, they simply seek to avoid conflicts where identically named files or data are sought to be held at the same store. Accordingly, conventional downloading and associated storage techniques in no way suggest or disclose the dictated, predetermined plan of storage facilitated with the storage control parameters recited in Applicants' claims. Accordingly, the Examiner's rejection of Applicants' claims in view of these techniques is without merit and must be withdrawn.

Continuing, the Examiner's reliance on the Kret teaching is yet more misplaced. While the Examiner contends that Kret features data transfer and controlled storage between a host and workstation, Kret teaches no such controlled storage. Indeed, to the extent Kret has any relevance, it is that it is a classic example of the prior art Applicants' invention improves upon.

As noted, a principal objective of Applicants' method is to reduce line traffic at the user station. Applicant achieves this by dictating what data will qualify for storage and under what conditions it will be allowed to be stored, all with the objective of making the user station as data independent of the host as possible so to minimize the host-station transfers and their associated cost in time and resources. Kret, on the other hand does not at all consider the amount and associated cost of

host-station transfers. Rather, in accordance with the Kret teaching, as described at col. 5, ln. 35 - col. 6, ln 14, the user station always obtains its data from the host, as in accordance with the Kret design, the host maintains the data extraction facility with is continually updating the data which is supplied to the station to satisfy a user query. In this regard see also Kret at col. 11, lns. 5 - 24; col. 11, ln. 25 - col 13, ln. 35 and col. 17, lns. 13 - col. 19, ln. 45.

Accordingly, Kret only contemplates conventional data uploading and downloading procedures in combination with conventional data storage. And, as such, Kret fails completely to disclose or suggest Applicants' invention.

In view of the above it can not be said that Kret anticipates Applicants' claims. The Court of Appeals for the Federal Circuit (CAFC) and its predecessor, the Court of Customs and Patent Appeals (CCPA), have repeatedly stated that for a prior art reference to anticipation a claimed invention under 35 U.S.C. §102, each and ever element of the claimed invention must appear in the single reference. *Diversitech Corp. v. Century Steps, Inc.*, 7 USPQ2d 1315, 1317 (Fed Cir 1988). Further, the CAFC has pointed out that the elements of the claimed invention must be arranged in the reference as they are in the claimed invention in order to establish an anticipation. *Lindemann Maschinefabrik v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed Cir 1984). Therefore, because kret fails to disclose or suggest use of storage control parameters his teaching can not be considered to anticipate Applicant's invention.

Accordingly, the Examiner's rejection of Applicants' claims 1 and 2 as anticipated by under 35 U.S.C. §102(e) is erroneous and must be withdrawn.

Continuing, with regard to Applicants' claims 3 to 20, as noted, the Examiner contended these claims were obvious in view of the general knowledge in the art and the teaching of Kret. However, here again the Examiner's analysis is wholly inconsistent with the method of evaluation mandated by the clear weight of judicial authority. In rejecting claims 3 to 20, the Examiner has dismembered Applicants' claims and disregard their expressly stated limitations. This approach clearly violates the now venerable fundamentals articulated in *Graham v. John Deer,* 148 U.S.P.Q. 459 (1966) for viewing the claim as a whole.

In rejecting Applicants' claims 3 to 20, the Examiner, on the pretense that the features by themselves were know wholly disregarded Applicants recital of steps for data caching and staging, as well as step for storage management with a least-recently-used algorithm. Accordingly, the Examiner's rejection of claims 56 to 65 under 35 U.S.C. §103 as obvious in view of either the know program storage art or Kret is improper and must be withdraw.

And, yet further, Kret, as an example of the predecessor art not only fails to suggest Applicants' invention, but, in fact, by virtue of its divergence from usage of controlled, predetermined storage, teaches away from Applicants' invention. ***In re Gordon,*** 221 USPQ 1125 (Fed Cir 1984), ***In re Schulpen,*** 157 USPQ 52 (CCPA 1968). Accordingly, the Examiner's contention

that Applicants' claims 3 to 20 are obvious in view of the Kret teaching is unfounded and the rejection must be withdraw.

While Applicants respectfully submit that their claims are patentably distinct from the art cited, in order to remove any questions and advance their case to issue, Applicants, have amended claim 1. Specifically, Claims 1 have been amended to expressly recite that the control parameters dictate predetermined eligibility for the storage of data. According, Applicants would respectfully submit that their claims as amended are patentably distinguished from the art cited.

Accordingly, in view of the noted amendments and preceding remarks, Applicants would respectfully submit that their invention is patentably distinguished from the art cited, and, that all objections with respect to 35 U.S.C. §112 have been removed. Applicants, therefore, requests reconsideration of their application and issuance of a patent thereon.

Dated: October 5, 1994,

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231, on October 5, 1994.
Name of Registered Representative: Paul C. Scifo, Esq.
Signature:
Date: October 5, 1994